Gradus

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ABSTRACT

We introduce `Gradus`, an open-source...

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1 INTRODUCTION

In the era of quantitative, precision observational tests of General Relativity in the strong field regime it is necessary to have a fast and flexible method to compute the observational properties of accreting black hole systems. We have developed an open-source integrator `Gradus`[1] for this purpose. In the remainder of the paper we describe how the software works, comparing with previous work in the literature, and outlining the new capabilities of `Gradius`.

Transfer functions (Cunningham 1975)

2 DESCRIPTION OF GRADUS

3 TEST PROBLEMS

4 USING GRADUS

5 CONCLUSIONS

We encourage the community to contact us with interesting problems that may be tackled using `Gradus` as we are happy to assist with new applications of the code.

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DATA AVAILABILITY

REFERENCES

Cunningham C. T., 1975, ApJ, 202, 788

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[1] Available as an open-source project on GitHub at `https://github.com/astro-group-bristol/Gradus.jl`.